SEP 0 1 2006

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| PRE-APPEAL BRIEF REQUEST FOR REVIEW  Application 1  |                      | 245402008000   |  |  |
|   |                      |  |  |  |
|   |                      | November 20, 200   |  |  |
|   |                      | 9,739  |  |  |
|   | First Named Inventor |  |  |  |
|   | Tomoki ONO et al.    |  |  |  |
|   |                      |  |  |  |
|   | Art Unit             |  | Examiner   |  |
|   | 28                   | 314  | S. Rao   |  |
| his request is being filed with a notice of appeal.  he review is requested for the reason(s) stated on the a Note: No more than five (5) pages may be provid   |                      | ).   |  |  |
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| am the applicant /inventor.   |                      | L  |  |  |
| applicant /inventor. assignee of record of the entire interest.   |                      | L  | Signature  |  |
| applicant /inventor.  | <br>B(b)<br>         |  | Thomas Chan  |  |
| applicant /inventor.  assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73 is enclosed. (Form PTO/SB/96)   | <br>3(b)             | Ту   | •  |  |
| applicant /inventor.  assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73 is enclosed. (Form PTO/SB/96)  attorney or agent of record.   | <br>3(b)<br>-        | Туј  | Thomas Chan  |  |
| applicant /inventor.  assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73 is enclosed. (Form PTO/SB/96)   |                      | ,  | Thomas Chan<br>ped or printed name   |  |
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| assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73 is enclosed. (Form PTO/SB/96)  attorney or agent of record. Registration number  x attorney or agent acting under 37 CFR 1.34.  | -<br>                | · (  | Thomas Chan ped or printed name (650) 813-5616 elephone number                       |  |
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| applicant /inventor.  assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73 is enclosed. (Form PTO/SB/96)  attorney or agent of record. Registration number  x attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34. | 51,543               | (<br>T<br>Se   | Thomas Chan ped or printed name (650) 813-5616 elephone number eptember 1, 2006 Date |  |

| I hereby certify that this paper (along with an<br>Express Mail, Airbill No. EV 581425372 US, |            |        |         | eing deposited with the U.S. Postal Service as Mail Stop AF. Commissioner for Patents. |
|---|------------|--------|---------|--|
| P.O. Box 1450, Alexandria, VA 22313-1450  | . 1        | $\sim$ | ~ \( \) |  |
| Dated: September 1, 2006  | Signature: | E LONG | ma wals | (Georgina Matos)   |

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV 581425372 US, on the date shown below in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Dated: September 1, 2006

SEP 0 1 2006

Signature: Lebourg

Docket No.: 245402008000

(PATENT)

Client Ref.: 903239-01 (RH/in)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Tomoki ONO et al.

Application No.: 10/719,739

Confirmation No.: 3121

Filed: November 20, 2003

Art Unit: 2814

For: NITRIDE SEMICONDUCTOR LIGHT

EMITTING DEVICE HAVING ELECTRODE ELECTRICALLY SEPARATED INTO AT

LEAST TWO REGIONS

Examiner: S. Rao

## ARGUMENTS ACCOMPANYING PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Dear Sir:

The following arguments are presented in support of the Pre-appeal Brief Request for Review being filed concurrently with a Notice of Appeal. Reconsideration and allowance of the pending claims are respectfully requested.

## REMARKS

In an Advisory Action mailed on July 27, 2006, the Examiner maintained the rejection of pending claims 1-18. Specifically, Claims 1-18 are rejected under 35 USC § 103(a) as allegedly being unpatentable over Saito et al. (U.S. Patent No. 6,121,634, herein after Saito) and Yoshida et al. (U.S. Patent No. 5,663,975, herein after Yoshida) and further in view of Papayoanou (U.S. Patent No. 4,241,319, herein after Papayoanou). Based on the Examiner's comments in the Advisory Action, there are disagreements between the Examiner and the Applicants regarding the facts of the present invention and the facts of the cited references. Applicants request reversal of the Examiner's rejection in view of the following remarks.

First, there is disagreement whether there is motivation to combine the teachings of Saito and Yoshida references with the Papayoanou reference to form the feature "wherein all the regions of said p-electrode or n-electrode share the optical cavity" of the present invention. In the July 17, 2006 response to the final Office Action, Applicants submitted that a person skilled in the art would consider the Papayoanou device belonging to a completely different technology class from the semiconductor light emitting devices of Saito and Yoshida, because of the differences in material and structure. The Saito and Yoshida references teach a semiconductor light emitting device while the Papayoanou teaches a gas laser device.

In the Advisory Action, the Examiner cites the last two lines of the Papayoanou Abstract and Saito column 1 lines 41-55 to support such motivation to combine the references. Applicants respectfully submit that these sections cited by the Examiner not only do not teach the motivation to combine, on the contrary, they further support the Applicants' contentions. In the last two lines of the Papayoanou Abstract, it is stated that "[The Stark cell, moreover,] is configured to include two pairs of electrodes which permit independent voltage modulation of two CO<sub>2</sub> laser beams."

(Emphasis added.) It is clear that the Papayoanou reference is significantly different from the Saito and Yoshida reference in material and structure because the Papayoanou reference teaches a gas (CO<sub>2</sub>) laser device while the present invention recites a nitride semiconductor light emitting device.

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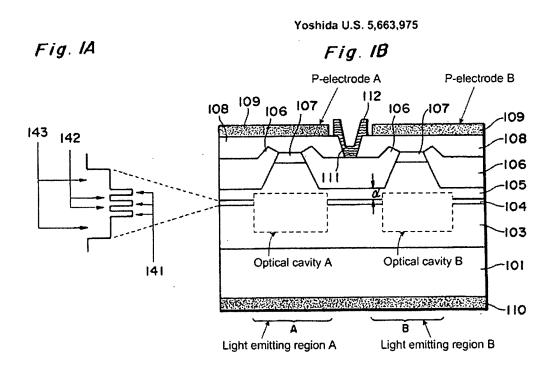
Moreover, the Examiner cites Saito column 1 lines 41-55 to support the motivation to combine the references. Applicants respectfully submit that the Saito reference in fact teaches away from combining two kinds of laser devices having different structures. Saito states that "[O]ther possible measures for treating the problem, such as high frequency multiplexing or use of two kinds of lasers, invite structural complexity. There is also a report on incorporating two kinds of laser structures in a single device by locally changing the thickness of the active layer. This approach, however, has revealed the difficulty in controlling the thickness of the active layer. Moreover, although a pickup head for reading and writing is typically composed of two kinds of lasers different in output power, its structure is much complicated." (See Saito, column 1, lines 48-57.)

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In accordance with MPEP 2143.01, modifying a reference to such an extent (i.e., changing its principle of operation) indicates that the teaching of the reference is not sufficient to establish a prima facie case of obviousness. Additionally, in In re Ratti, the CCPA reversed an obviousness rejection based on a combination of references and held, "the suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] constructed was designed to operate." 270 F.2d 810, 813 (CCPA 1959). Similarly, in the present case, the Saito reference clearly indicates that the Examiner's proposed modification of the Saito and Yoshida references to combine with the Papayoanou reference would require substantial reconstruction and redesign because of the difficulties and complexities as taught by Saito.

Second, there is disagreement whether the Yoshida reference teaches the claimed feature "wherein the p-electrode or the n-electrode is divided into at least two regions" of the present invention. In the Advisory Action, the Examiner restated the rejection of the Office Action dated October 28, 2005, alleging Figure 1B, 3C and at column 7 lines 50-65, and column 8 lines 55-65 of the Yoshida reference teaches this claimed feature. The Applicants respectfully remind the Examiner that Applicants have already responded to this rejection in the February 28, 2006 response to the Office Action, and the Examiner has not specifically responded to the Applicants' arguments on this point. The highlight of Applicants' arguments is shown below.

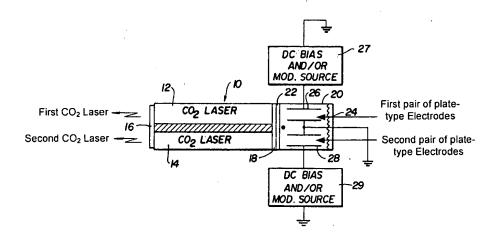
In particular, Applicants respectfully submit that the Examiner cannot rely on two pair of separate electrodes, each pair of electrodes having its own independent distinct light emitting region, to render the feature "wherein the p-electrode or the n-electrode is divided into at least two regions" of the present invention obvious.



The Figure 1B of the Yoshida reference is shown above, where Applicants added annotations of p-electrode A, optical cavity A, light-emitting region A, p-electrode B, optical cavity B, and light-emitting region B to help the Examiner to better understand the Yoshida reference. A person skilled in the art would recognize that two beams are emitted in the direction at right angles to the drawing sheet plane in Figure 1B. The <u>multiple light emitting regions</u> in the Yoshida reference are <u>due to the additional pair of electrodes</u> being added to the semiconductor light emitting device. The Yoshida reference is distinguished in that the present invention claims <u>one pair of electrodes</u>, a p-electrode and an n-electrode. The Yoshida reference fails to teach the p-electrode or the n-electrode is divided into at least two regions, and where all the regions of the p-electrode or the n-electrode share one optical cavity.

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The Papayoanou reference also teaches <u>two pair of distinct independent electrodes</u> as opposed to <u>one pair of electrodes</u> disclosed in the present invention. Figure 1 of the Papayoanou is shown below. Applicants added annotations first CO<sub>2</sub> laser, second CO<sub>2</sub> laser, first pair of plate-type electrodes, second pair of plate-type electrodes, and their corresponding arrows to illustrate the two pairs of distinct independent electrodes and their corresponding emitted laser beams. Similarly, The Papayoanou reference fails to teach the p-electrode or the n-electrode <u>is divided into at least</u> two regions, and where all the regions of the p-electrode or the n-electrode share one optical cavity.



Therefore, Applicants assert that the combination of the cited references do not teach or suggest claim 1 of the present invention. Applicants also assert that claims 2-18, which variously depend from independent claim 1, are allowable for at least the reason that they depend from allowable independent claims.

## **CONCLUSION**

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing Attorney Docket No. 245402008000. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: September 1, 2006

Respectfully submitted

Thomas Chan

Registration No.: 51,543

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